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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,996	10/10/2001	Kenichi Fujii	862.C2404	4792

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EXAMINER
BRANT, DMITRY

ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/972,996	FUJII ET AL.
	Examiner	**Art Unit**	
	Dmitry Brant	2655	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10/5/01_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-32_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-32_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-2, 5-9, 14, 15-16, 19-23, 29-32 are rejected under 35 U.S.C. 102(e) as

being anticipated by Thelen et al. (6,487,534 filed 3/23/00)

The table below summarizes the limitations of this application and the

corresponding parts of Thelen et al. which read on these limitations.

Claim#	Limitations	Thelen et al.
1, 15	A speech recognition system in which a client and a device that provides a speech recognition process are connected, and which provides a plurality of usable speech recognition means to the client, comprising:	Client + plurality of servers (Col. 2, lines 32-43 and FIG. 6)
	speech input means for inputting speech at the client	(inherent for speech reception of speech input signal, 740, FIG. 7 or 331, FIG. 3)
	designation means for designating one of the plurality of usable speech recognition means	speech controller and switch direct speech input signal to server stations (Col. 2, lines 32-43, and elems. 335-6, FIG. 3)

	and processing means for making the speech recognition means designated by said designation means recognize speech input from said speech input means.	recognition on the server (314, FIG. 3)

2, 16	The system according to claim 1, wherein said designation means comprises:
	
	    detection means for detecting designation information used to designate one of the plurality of usable speech recognition means from the speech input by said speech input means, and
	
	    said designation means designates one of the plurality of usable speech recognition means on the basis of the designation information detected by said detection means.
		Local recognizer parses user's commands (334, FIG. 3 and Col. 2, lines 40-43)
		
		Controller performs selection of the server and the routing of speech data to that server (335, FIG. 3 and Col. 2, lines 40-43)

5, 19	The system according to claim 1, wherein each of said plurality of usable speech recognition means is capable of converting data format of speech input by said speech input means into a speech data format that can be recognized by speech recognition processing when the data format of the speech input by said speech input means is different from the speech data format.	Speech recognition systems inherently convert the format of input speech into a different data format used for speech recognition (A/D conversion, framing, filtering, feature vectors, etc.) (Col. 4, 14-28)

6, 20	A speech recognition system in which a client and a plurality of devices that provide a speech recognition process are connected, wherein the client comprises:
	
	    speech input means for inputting speech
	
	    designation means for designating one of the plurality of speech recognition process,
	
	    wherein said system comprises processing means for making a speech recognition process provided by a device designated by said designation means, recognize the speech input from said speech input means.
		Client + plurality of servers (Col. 2, lines 32-43 and FIG. 6)
		
		(inherent for speech reception of speech input signal, 740, FIG. 7 or 331, FIG. 3)
		
		speech controller and switch direct speech input signal to server stations (Col. 2, lines 32-43, and elems. 335-6, FIG. 3)
		
		recognition on the server (314, FIG. 3)

7, 21	The system according to claim 6, wherein said client farther comprises detection means for detecting speech corresponding to designation information used to designate one of the plurality of usable speech recognition means, from the speech input by said speech input means,	Local recognizer parses user's commands: "Select Philips, " (334, FIG. 3 and Col. 2, lines 40-43). Speech recognizer is inherently built to detect speech.
	wherein said designation means converts the speech detected by said detection means into designation information by using a speech recognition on the client, and designates one of the plurality of said speech recognition means on the basis of the converted designation information.	Local recognizer/controller performs selection of the server and the routing of speech data to that server (335, FIG. 3 and Col. 2, lines 40-43)
8, 22, 29, 31	A client in a speech recognition system to which a device that provides a speech recognition process is connected, and which provides a plurality of usable speech recognition means, comprising:	Client + plurality of servers (Col. 2, lines 32-43 and FIG. 6). Client computers necessarily contain storage mediums (RAM, hard disks, etc.) + software.
	speech input means for inputting speech	(inherent for speech reception of speech input signal, 740, FIG. 7 or 331, FIG. 3)
	and designation means for designating one of the plurality of usable speech recognition means	speech controller and switch direct speech input signal to server stations (Col. 2, lines 32-43, and elems. 335-6, FIG. 3)
	and processing means for making the speech recognition means designated by said designation means recognize speech input from said speech input means.	recognition on the server (314, FIG. 3)
9, 23	The client according to claim 8, wherein said designation means comprises:	
	detection means for detecting designation information used to designate one of the plurality of usable speech recognition means from the speech input by said speech input means, and	Local recognizer parses user's commands: "Select Philips, " (334, FIG. 3 and Col. 2, lines 40-43). Speech recognizer is inherently built to detect speech.

	said designation means designates one of the plurality of usable speech recognition means on the basis of the designation information detected by said detection means.	Local recognizer/controller performs selection of the server and the routing of speech data to that server (335, FIG. 3 and Col. 2, lines 40-43)
14, 28, 30, 32	A server which is connected to a client via a network, and provides a plurality of usable speech recognition means to the client, comprising:	(servers necessarily contain storage mediums + software (RAM, hard disks, etc.))
	providing means for providing a designation operation environment that allows the client to designate one of the plurality of usable speech recognition means	Web page containing advertising banners of different companies, having their own recognition servers (Col. 2, lines 36-40). Either the whole web-page or specific banners read on the "providing means for providing a designation operation."
	and processing means for making the speech recognition means designated by said providing means recognize speech received via the network.	Speech recognizer on a dedicated SR server (314, FIG. 3)

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 3-4, 10-13, 17-18, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thelen et al.

As per claims 3, 11, 13, 17, 25, 27, Thelen et al. do not disclose "GUI input means for designating one of the plurality of usable speech recognition means via graphical user interface."

However, Thelen et al. disclose the use of a web page containing advertising banners of different companies, each company having its own recognition servers (Col. 2, lines 36-40). The users select the banner by saying the banner's name, tag name, etc. (Col. 2, lines 45-48). The examiner takes the official notice that it is extremely well-known in the art to navigate web pages using GUI by clicking on the banner using a standard IO device, such as a computer mouse.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Thelen et al. to choose recognition servers by using a standard GUI to select the associated banners (by clicking on them, for example), as this is the most well-known and universally accepted method of navigating web pages, and would allow the users to browse the "speech recognition" web pages in a way identical to browsing the "regular" web pages.

As per claims 4, 12, 18, 26, Thelen et al. discloses receiving input speech (740, FIG. 7) but do not explicitly disclose using "plurality of speech input means."

However, the examiner takes the official notice that input systems with multiple microphones (such as microphone arrays) are notoriously well-known in the art and are used in a variety of systems adapted for noisy or spatially large environments (conference rooms, car SR, home entertainment systems, etc.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Thelen et al. to use multiple speech input means (microphones), as such arrangement is very well-known in the art, and would allow the users of Thelen et al.'s system to improve the reception of speech signal in noisy or spatially large environments (conference rooms, etc.)

As per claims 10, 24, Thelen et al. do not disclose a situation "when said detection means does not detect any designation information, said processing means recognizes the speech input from said speech input means without using the plurality of speech recognition means."

However, Thelen et al. disclose an embodiment where a local recognizer is used to identify a "routing command" and direct the speech signal to the appropriate server (Col. 9, lines 4-16). In other words, a local recognizer does recognize input speech, but if the routing command was not present in the table or was not specified by a user (Col. 9, lines 5-10), then the client station would not be able to contact the SR server for the further speech recognition. Hence, assuming that no default SR server is specified, whenever the client cannot resolve the destination server, all the speech processing must be either performed directly on the client using a limited speech recognizer (334, FIG. 3) or aborted altogether. Since the latter option is not useful, the limited speech recognizer on the client is the only viable device that can perform speech recognition in

the situation described above or when small commands are used for operation of the client's workstation (Col.8, lines 49-60)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Thelen et al. to use a local recognizer as a back-up option whenever the remote server is not specified in order to provide the user with some speech recognition capability instead of aborting the transaction altogether. This would improve the overall usability of the system and would work particularly well in situations where the small commands are used in operation of the client's workstation (Col.8, lines 49-60)

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Thelen et al. (6,526,380) teach a system with multiple parallel recognizers.

White et al. (6,408,272) teach a distributed voice recognition system.

Joost (6,327,568) teaches a distributed voice recognition system.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Brant whose telephone number is (703) 305-8954. The examiner can normally be reached on Mon. - Fri. (8:30am - 5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Talivaldis Ivars Smits can be reached on (703) 306-3011. The fax phone

number for the organization where this application or proceeding is assigned is (703)

872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to Tech Center 2600 receptionist whose telephone

number is (703) 305- 4700.

DB

9/7/04

SUSAN MCFADDEN
PRIMARY EXAMINER